REMARKS/ARGUMENTS

Claims 1-27 are pending. Claims 1 and 8 have been amended to further describe the claimed microcapsules. Support for these amendments is found on page 12, line 25-page 13, line 18,of the specification. Other minor clarifying revisions have been made, including the correction of the term "cationogenic" in Claim 25 to "anionogenic". Support for this correction is found at the bottom of page 6 of the specification. Claims 26 and 27 find support in original Claim 1 and on pages 8-9 of the specification. Accordingly, the Applicants do not believe that any new matter has been added.

Rejection—35 U.S.C. §112, first paragraph

Claims 24 and 25 were rejected under 35 U.S.C. § 112, first paragraph, as lacking adequate description for the phrase "A method for pH mediated release of an encapsulated material comprising exposing the microcapsules to a pH of about 2 to 7". Pages 8-10 of the specification provide descriptive support of this subject matter. Page 2, lines 10-15, describe provision of microspheres where the time of release of the encapsulated ingredient, such as a fragrance or perfume, can be precisely determined. This object is achieved "by means of microcapsules whose capsule shells are destabilized by a change in pH". Page 2, lines 16-27, further describe microcapsules having capsule shells which are "destabilized by a change in pH", for example, microcapsules having shells comprising monomers in which "at least one bond is acid-hydrolyzable". Page 9, lines 34-37, further characterize the acid-hydrolyzable bond: "acid-hydrolyzable bond is a bond which is hydrolyzed in aqueous solution by a dilute acid, for example, at a pH of from 2 to 7". Page 10, lines 10-14, indicate that the microcapsule shell is destabilized by placement in an acidic

medium. Accordingly, the Applicants respectfully submit that the specification adequately describes the methods of Claims 24 and 25 and request that this rejection be withdrawn.

Rejection—35 U.S.C. §112, second paragraph

Claims 18, 19, and 22 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. These rejections are moot in view of the amendment above.

Rejection—35 U.S.C. §102

Claims 12-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by Langley et al., U.S. Patent No. 5,460,817. The particles of Langley are structurally and functionally distinguishable from those of the invention, because they are produced by a materially different process which would impart different structural or compositional characteristics to them.

The process by which the claimed microcapsules are obtained is called *in situ* polymerization. However, the microcapsules of Langley et al. are obtained by coacervation (see e.g., Claim 1 of Langley et al., referring to an outer protective coazervated polymer shell).

The *in situ* polymerization is now described in greater detail in Claims 1 and 8. This process involves producing an oil-in-water emulsion, where the oil phase contains the monomers to be polymerized. Upon polymerization these monomers emerge from the oil phase (not being soluble in either the oil or water phase) and migrate to the interface between the oil and water and eventually encapsulate the oil phase.

On the other hand, in the coacervation process, droplets of the core material are dispersed in a solution of the shell-forming polymer. By adding a precipitation agent or by changing the pH, the solution of the shell-forming polymer is precipitated and deposits at the surface of the droplets of the core material. The shell is subsequently crosslinked by a crosslinking agent, such as glutaraldehyde (see Example 4 of Langley et al. where the shell polymer is poly(vinylalcohol) which is crosslinked with glutaraldehyde). Example 7 of Langley et al. exemplifies the so-called complex coacervation process where two polymers of opposite charge are combined and precipitate around droplets of a dispersed core material. Thus, the coacervation process of Langley involves different reagents and steps and would produce microspheres distinct from those produced by the *in situ* polymerization of the present invention.

Claim 1 and Claim 8 of the present application require that the polymer that constitutes the capsule shell contains cationogenic or anionogenic monomers, respectively. The terms "anionogenic" and "cationogenic" are described in the specification on page 6, lines 41 to page 7, line 3 and page 8, lines 33 to 37, and differ from the related terms "cationic" or "anionic". Briefly, anionogenic or cationogenic monomers have side groups which become charged under either alkaline or acidic pH, respectively. Otherwise, these groups are uncharged. Thus, anionogenic monomers are uncharged but are susceptible to becoming anionic in the basic pH range. Similarly, cationogenic monomers are uncharged monomers that become cationic in the acid pH range. Upon addition of base or acid, respectively, these monomers become anionic or cationic so that the polymer shell becomes water-soluble and the content of the capsule is released.

The present invention requires selection of *anionogenic* or *cationogenic* monomers, which is not suggested by Langley et al. While the Official Action indicates that Examples 7 and 11 of Langley et al. disclose copolymers that encompass "at least 10 % anionic or cationic monomers", there is no suggestion to select *anionogenic* or *cationogenic* monomers.

Moreover, Example 7 of Langley et al. employs a complex coacervation between a copolymer of acrylamide/sodium acrylate and a cationic urea/formaldehyde resin. Sodium acrylate is an anionic monomer (not an *anionogenic* monomer as required by the present invention). Notwithstanding this difference, the example does not disclose the amount of sodium acrylate actually contained in the shell polymer, based on the total weight of the shell polymer. The present invention (Claim 8) refers to at least 10% of anionogenic monomers in the shell and this is not disclosed or suggested by Langley. Accordingly, for all of the reasons set forth above, the Applicants respectfully request that this rejection be withdrawn.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

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